Calibration Frequency and Guidance for Tritech Products

Following enquiries and questions regarding the recommended frequencies and procedures for the calibration of Tritech products this advisory is intended to offer general advice and recommendations to customers and end users. It should be read along with other relevant product specific manuals or customer specific procedures. The product manuals for Tritech's current and legacy products can be found at www.tritech.co.uk.

Multibeam Sonars *(except 720is 720ik & 1200ik)*
Mechanical Scanning Sonars
Side Scan Profilers
Sub-Bottom Profilers

The accuracy of the displayed returns for the above products is reliant on an accurate value for the speed of sound through the water. If this value is not consistently correct discrepancies in reported target range are introduced to the sonar display, particularly at long distances. As such these products can not be calibrated, and there is no reason to return for recalibration.

Should the end user notice anything unusual in the operation of the sonar (e.g. display, change in return levels) or mechanical damage to the sonar, the unit may be returned to Tritech for examination and any repairs. Please contact Tritech Support in the first instance at support@tritech.co.uk if the sonar is not behaving as expected or the performance appears reduced.

Gemini 720is 720ik and 1200ik Multibeam Sonars

These models of multibeam sonars include an integral VoS sensor to measure the speed of sound in water which is setup and calibrated at original manufacture. Once set and verified, the VoS sensor is not subject to drift or change in tuning and does not require further calibration unless subject to physical damage or if not operating as expected.

Should the end user notice anything unusual in the operation of the sonar (e.g. display, change in return levels) or mechanical damage to the sonar, the unit may be returned to Tritech for examination and any repairs. Please contact Tritech Support in the first instance at support@tritech.co.uk if the sonar is not behaving as expected or the performance appears reduced.

MicronNav USBL Products

The magnetic sensors contained in the Surface "Dunking" Transducer are calibrated at time of manufacture and should not require any further calibration above that detailed within the relevant product manual. The accuracy range and relative bearing information is dependent on the accuracy of the value entered in or being used by the Genesis software.

Should the output of the surface "Dunking" Transducer or Micron Modems not behave as expected, a noticeable reduction in accuracy or range be observed or the items receive significant mechanical damage, the system may be returned to Tritech for appraisal and performance testing. Please contact Tritech Support in the first instance at support@tritech.co.uk for further assistance.

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iGC and iFG Products

The Intelligent Gyro-Compass (iGC) measures the magnetic heading and is calibrated at the time of manufacture. It is not considered a survey grade instrument and therefore not subject to a strict recalibration period but should be returned for service and recalibration should the unit start to display unexpected or inconsistent readings.

The Intelligent Fibreoptic Gyroscope (iFG) is a relative positional instrument that operates in conjunction with input from an iGC or similar. The unit is setup and checked at manufacture and not subject to further calibration checks. Inconsistent or incorrect readings from the iFG may indicate damage and the unit should be returned to Tritech for evaluation and repair.

Bathymetric Sensors

Ideally these sensors should be recalibrated every 12 months or at the frequency specified in the specific product literature. Should there be observable inaccuracies in the output or the unit subject to shock, overpressure or other physical damage Tritech recommend it be returned for evaluation and repair / recalibration as required.

Altimeters

The output from these instruments are derived from the timing of an acoustic echo based on a fixed speed of sound. The instrument is tuned to give the best acoustic response at time of manufacture, but the timing and therefore value output is fixed and should not subject to further calibration.

Inconsistent or variable performance of the Altimeter may indicate damage or a drift in tuning of the acoustic receiving circuit. If this is noticed the product should be returned to Tritech for appraisal and adjustment, or repair, as required. There is no set service interval for these products, and the return of these products for service is at the discretion and judgement of the customer based on the duration and conditions of use and performance.

For any queries regarding this notice please contact Tritech through your usual sales and support channel, or directly via email to support@tritech.co.uk.